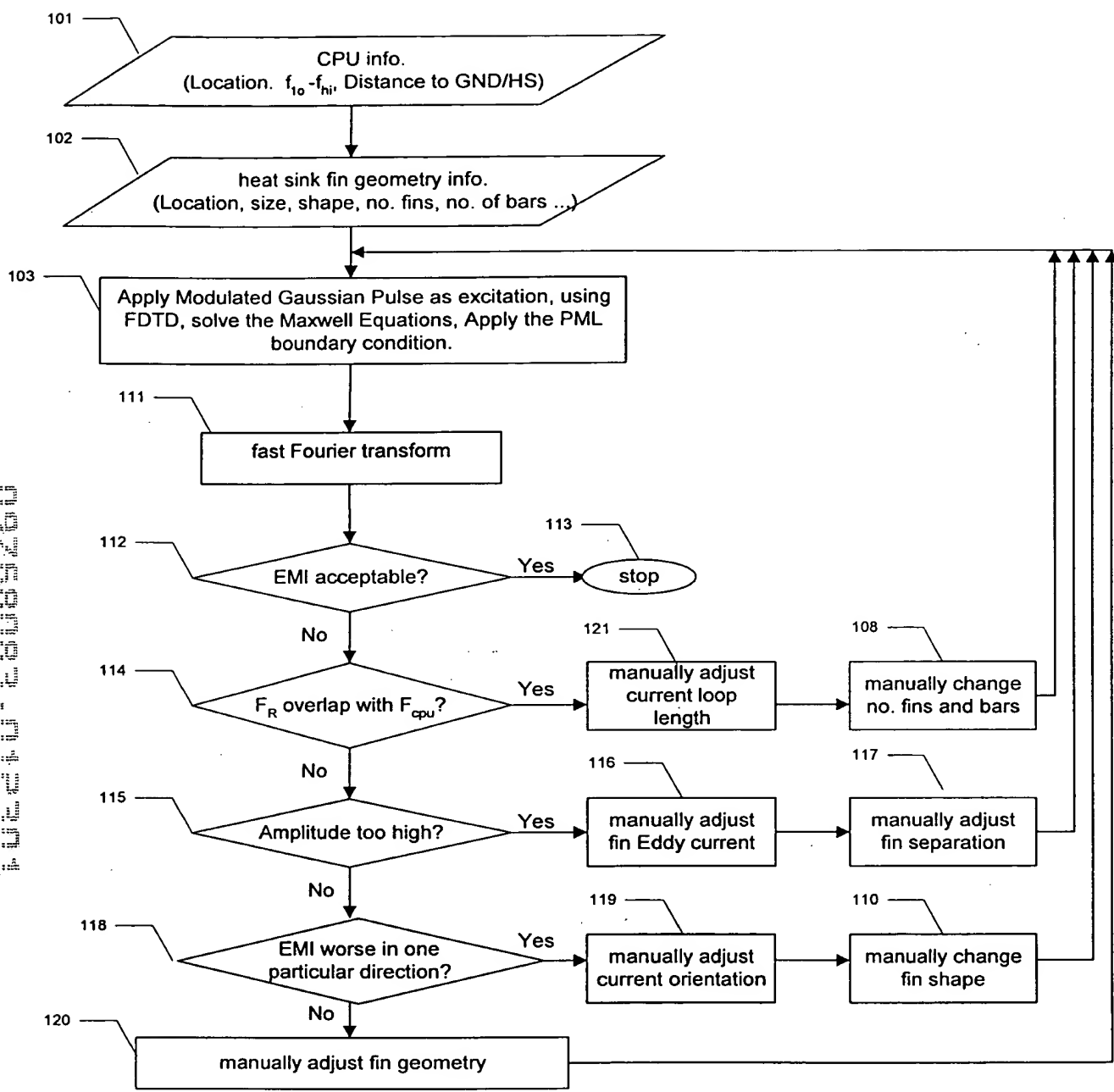


Note: HS — Heatsink  
 $f_{lo}$ - $f_{hi}$  — frequency window range  
 $F_r$  — Resonance frequency of the heatsink  
PML — Perfect Matched Layer  
FDTD — Finite Difference in Time Domain  
GND — Ground  
FFT — Fast Fourier Transform

FIG. 1

Patented 600,000,000



Note: HS — Heatsink  
 $f_{10}$ - $f_{hi}$  — frequency window range  
 $F_r$  — Resonance frequency of the heatsink  
 PML — Perfect Matched Layer  
 FDTD — Finite Difference in Time Domain  
 GND — Ground  
 FFT — Fast Fourier Transform

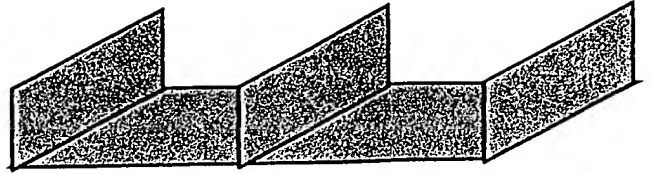
FIG. 1A

Case A



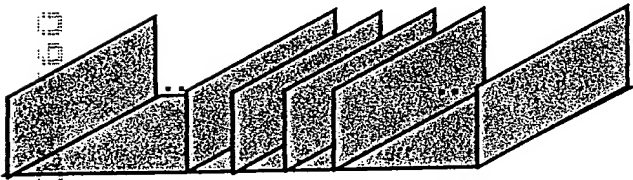
No fin, No top

Case B



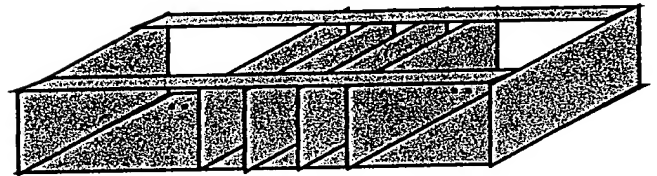
3 fins, No top

Case C



25 fins, No top

Case D



25 fins, 2 top bars

Fig. 2

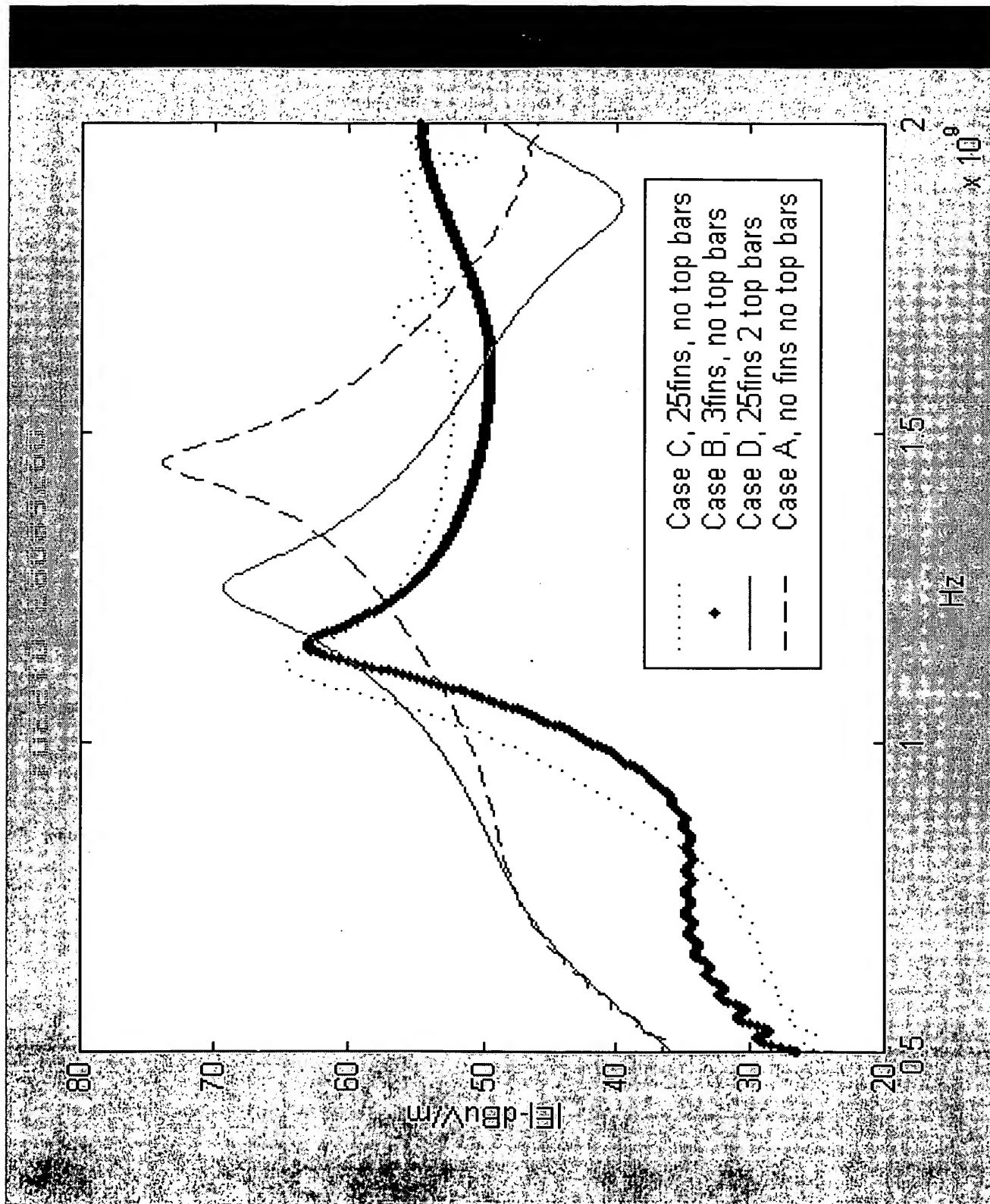


Fig. 3

FIG. 4

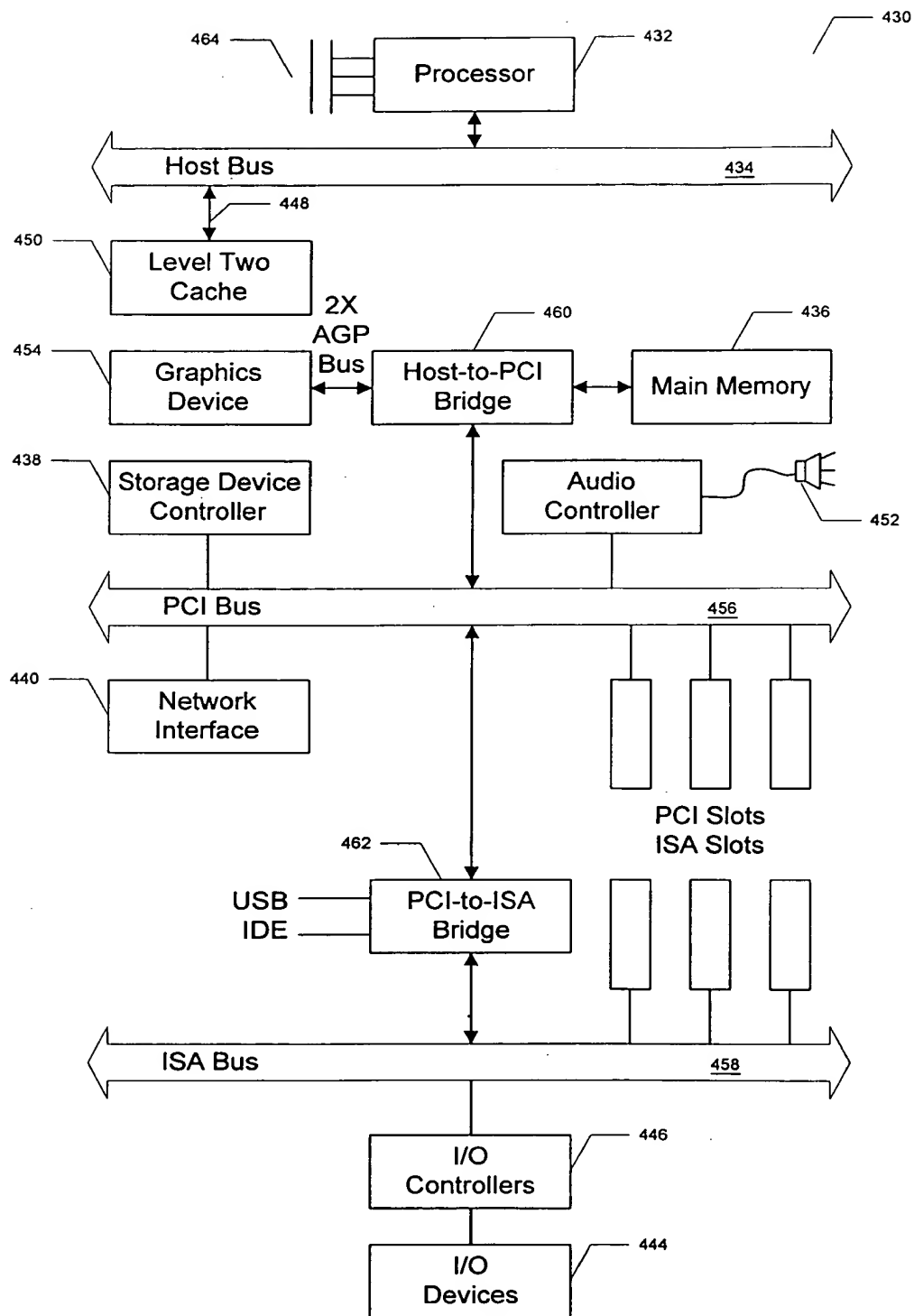


FIG. 4